Operation and Care Manual

Asepsis 21 Hygienist's Cart

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CE 0088

TPW1543 Rev. G

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Label Definitions

Hazards which result in severe personal injury or death.

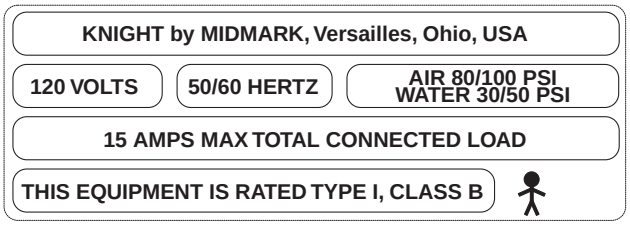
Hazards which could result in personal injury.

Hazards which could result in equipment or property damage.

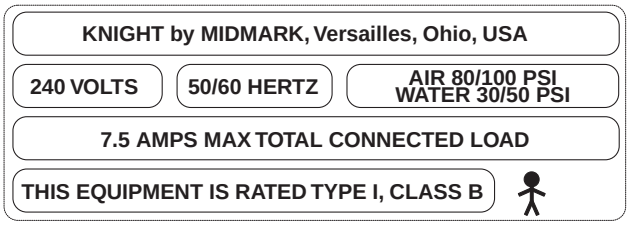
Alert user to pertinent facts and conditions.

"DANGER
- EXPLOSION HAZARD -
DO NOT USE THIS EQUIPMENT IN THE PRESENCE OF FLAMMABLE ANESTHETICS"

RATING FOR 120 VOLT UNIT


KNIGHT by MIDMARK, Versailles, Ohio, USA
120 VOLTS
50/60 HERTZ
AIR 80/100 PSI
WATER 30/50 PSI
15 AMPS MAX TOTAL CONNECTED LOAD
THIS EQUIPMENT IS RATED TYPE I, CLASS B

RATING FOR 240 VOLT UNIT


KNIGHT by MIDMARK, Versailles, Ohio, USA
240 VOLTS
50/60 HERTZ
AIR 80/100 PSI
WATER 30/50 PSI
7.5 AMPS MAX TOTAL CONNECTED LOAD
THIS EQUIPMENT IS RATED TYPE I, CLASS B

CONFORMS TO
UL STD. 2601-1
CERTIFIED TO
CAN/CSA - C22.2
NO. 601.1

Introduction

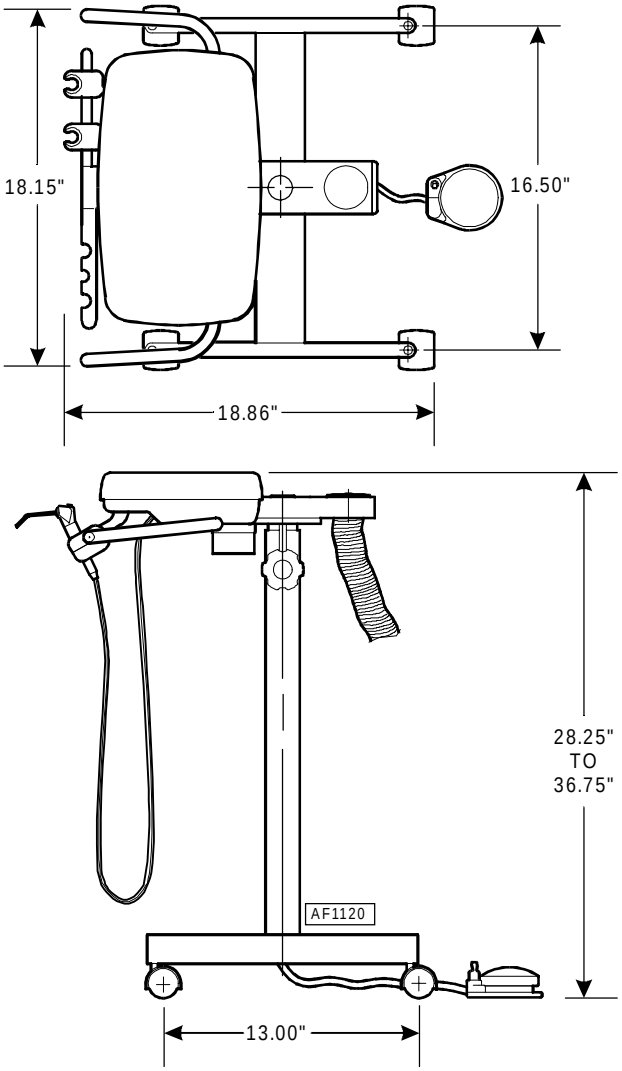
Your Asepsis 21 Hygienist's Cart Delivery System by Knight Manufacturing has been designed and manufactured with care and you in mind. It is constructed of the highest quality material to provide years of trouble free service.

The instrument head provides for the control of two air operated handpieces, HVE, saliva ejector and a 3-way syringe. The handpieces are stored in their respective holders which may be rotated to your preferred position. When the handpiece is removed from the holder, it is automatically selected to operate when the foot control is depressed.

Should a handpiece be removed from its holder while another handpiece is being used (as for bur change by the assistant), that handpiece can be turned off by inserting a simulator or syringe into the holder. Contact your authorized Knight dealer for details.

Your new Asepsis 21 also features a handpiece lubricant collection system. The handpiece exhaust tubes from the four port handpiece tubes are connected to a collector jar which is located on the bottom center of the instrument head. The collection jar can be removed to be emptied and cleaned simply by unscrewing it from the unit. The collector jar should be inspected daily and emptied when approximately 1/2 inch of oil has accumulated.

The aerodynamic shape of the instrument head lends itself to easy cleaning or wrapping for infection control.



Controls

ASEPSIS 21 HANDPIECE DELIVERY SYSTEM CONTROLS LOCATED UNDER COVER

A complete set of handpiece and syringe adjustments are located directly under the magnetically held cover for protection against contamination. Lift up either back corner of the cover for easy removal. All controls are labeled with symbols identifying their function. A description of their locations an functions are identified below.

1-2-3 ~
HANDPIECE COOLANT WATER VOLUME
Adjusts the amount of coolant water to each respective handpiece.

4-5-6 ~
DRIVE AIR PRESSURE SETTING
Individual adjustments are provided - one for each respective handpiece. Set the maximum handpiece pressure indicated on the gage. Refer to the handpiece manufacturer's specifications for proper setting.

7 ~
SYRINGE AIR VOLUME ADJUSTMENT
Controls the volume of air to the syringe and effects water spray pattern.

8 ~
SYRINGE WATER VOLUME ADJUSTMENT
Controls the volume of water to the syringe and effects water spray pattern.

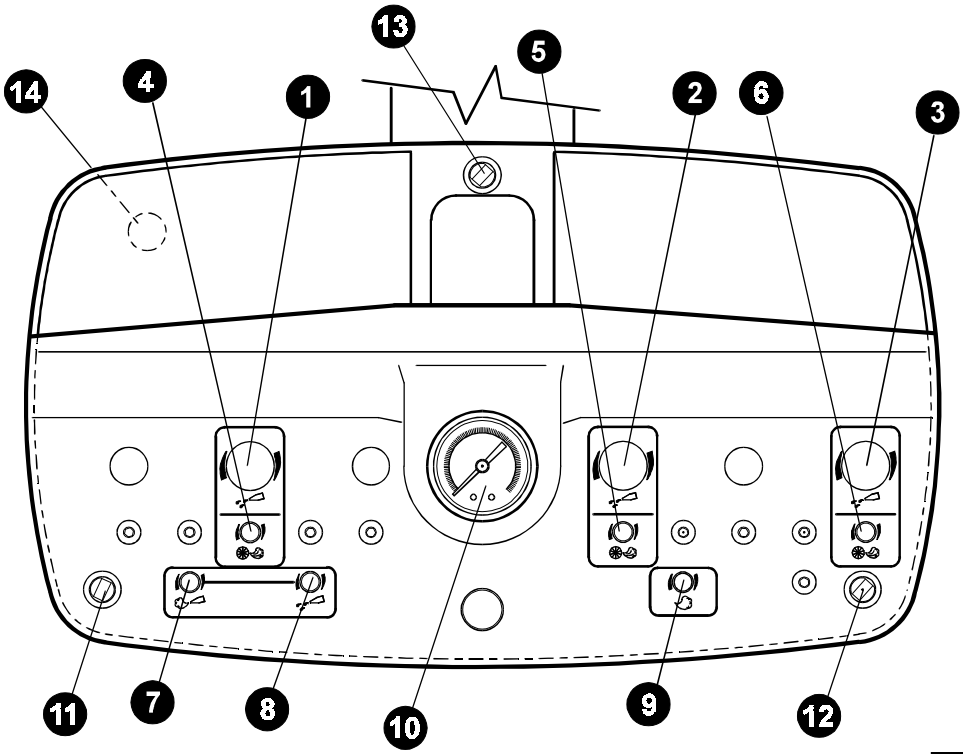
9 ~
COOLANT AIR VOLUME ADJUSTMENT
This adjustment controls the volume of coolant delivered to each handpiece. It effects the spray pattern of air and water at the handpiece. If the handpiece has a coolant air connection in the handpiece itself, this adjustment will have no effect and can be completely shut off.

10 ~
HANDPIECE PRESSURE GAGE
Indicates individual handpiece pressure when the handpiece is operating.

11-12-13 ~
MAGNETIC LATCHES
These hold the cover in place.

14 ~
HANDPIECE COOLANT WATER FLUSH BUTTON
Controls the coolant water flush valve and is located on the underside of the delivery head.

ASEPSIS 21 INSTRUMENT HEAD WITH TOP COVER REMOVED



Controls

EXTERNAL CONTROLS AND FUNCTIONS

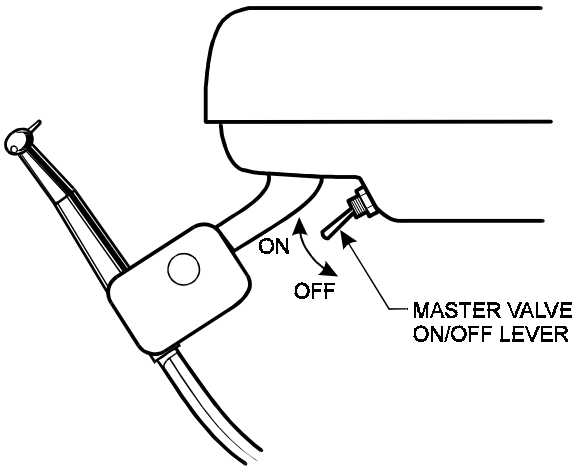
MAIN ON /OFF VALVE
Located on the bottom of the instrument head directly behind the handpiece holder bar support, this two position toggle control turns the main air and water on or off (See the illustration below).

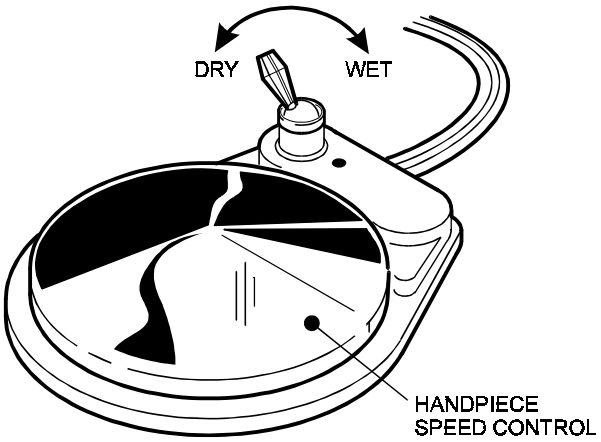
AUTOMATIC HANDPIECE ACTIVATION
The automatic kink valves are designed to permit activation of the selected handpiece when it is removed from its holder. Drive air will be delivered to the withdrawn handpiece when the foot control is depressed.

WET/DRY FOOT CONTROL
The disc-type foot control operates the selected handpiece at varying speeds depending upon the foot pressure applied to the disc. Positioning the coolant water selector toggle allows coolant water for wet cutting to be selected by the motion of the foot. Applying foot pressure to the disc will operate the selected handpiece and, if turned on, water spray (See the illustration below).

WATER ON/OFF VALVE
Located on the foot control, this switch provides water for coolant spray to the handpiece when the switch is moved forward to the "On" position (toward blue dot) and the foot control is depressed (wet cutting). When the valve is in the "Off' position, water will not be delivered to any handpiece (See the illustration below).

ASSISTANT'S INSTRUMENTATION
A saliva ejector, HVE and syringe are standard instrumentation on the unit. They are positioned on a swing arm holder located opposite the Asepsis 21 instrument head.





WET/DRY FOOT CONTROL

Operation

The automatic kink valves are designed to permit activation of the selected handpiece when it is removed from is holder. Drive air will be delivered to the withdrawn handpiece when the foot control is depressed (See the illustration).

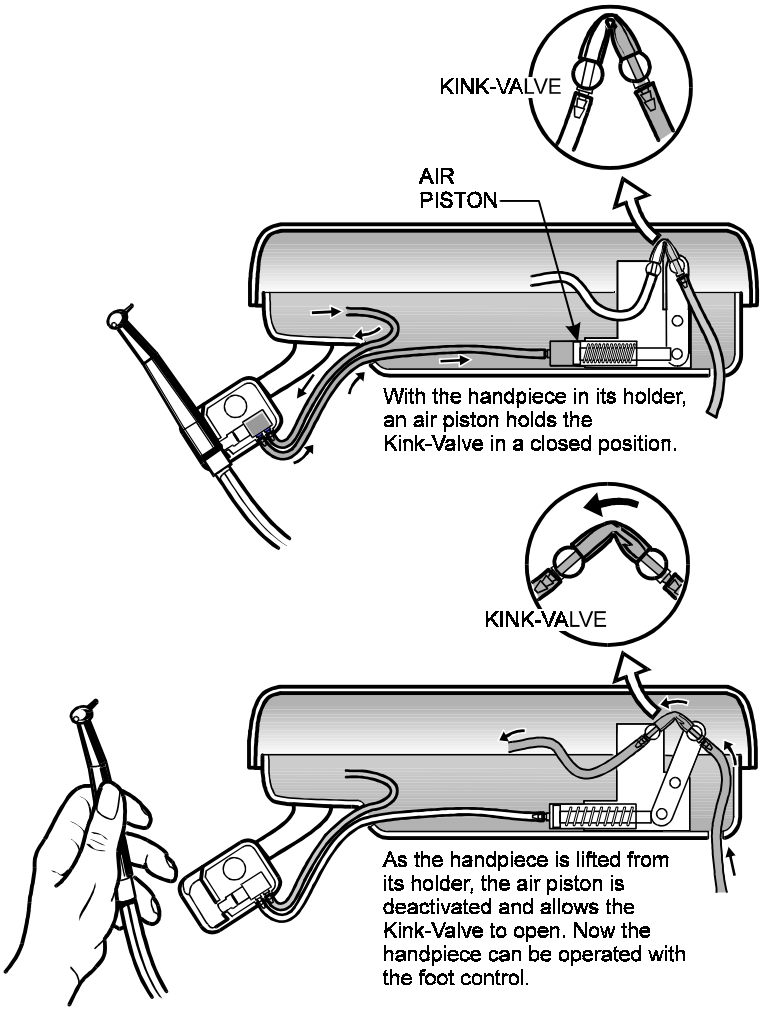
~ BASIC OPERATION ~

1. Turn on the master valve lever located on the underside of the Asepsis 21 instrument head.

2. Flip the wet/dry toggle on the foot control to the desired position.

3. Lift the handpiece from its holder and depress the foot control.

4. If necessary, make adjustments by lifting the cover off the Asepsis 21 head and adjusting the control knobs as desired. (See Controls Section).


KINK-VALVE
AIR
PISTON
With the handpiece in its holder, an air piston holds the Kink-Valve in a closed position.
KINK-VALVE
As the handpiece is lifted from its holder, the air piston is deactivated and allows the Kink-Valve to open. Now the handpiece can be operated with the foot control.

Cleaning and Maintenance

Knight Mfg. strongly recommends barrier protection as the most effective and safest way to control cross contamination. Some disinfections may cause costly damage to the equipment. If disinfectants are to be used, we recommend the products listed below. Follow manufacturers directions carefully.

CLEANING THE UNIT SURFACES

Surfaces should be wiped regularly with a soft cloth. The equipment should be washed occasionally with soap and water.

CAUTION: Avoid using agents containing Phenol water and/or phenol alcohol. These may cause damage to plastic surfaces.

The following disinfectant/ cleaner products have been tested and are recommended for us on plastic and painted surfaces.

Cavicide
distributed by E&D Dental Products Inc., Westfield, NJ

Precise - Hospital Foam Cleaner Disinfectant
manufactured by Caltech Industries, Inc., Midland, MI

CAUTION: Failure to follow manufacturer directions may damage surfaces.

CLEANING HANDPIECE, SYRINGE AND VACUUM HOSES

The hoses can be washed with soap and water.

MAINTAINING THE VACUUM SYSTEM

Use only a cleanser specifically formulated for dental vacuum systems and follow manufacturer directions carefully.

CAUTION: Failure to follow manufacturer directions may damage your vacuum system.

CLEANING THE SOLIDS COLLECTOR

Turn off the vacuum supply. Lift up the cap on top of the solids collector to expose the basket strainer. Empty the basket strainer and scrub it with a brush. To help simplify the basket removal, wet the inside of the solids collector with the syringe after removing the cover. The water will soften the amalgam for easier removal of the basket. When clean, return the basket to the collector and replace the cap. The solids collector should be cleaned daily to avoid loss of suction. Replacement basket strainer can be ordered under Knight Part Number 151894.

SERVICING THE AIR AND WATER FILTERS

To insure proper air and water flow, the internal air and water filters should be serviced every three months (More or less frequently depending on water quality). This work should be performed by a qualified service technician. Please contact your authorized Knight dealer for more information.

CLEANING AND MAINTENANCE SCHEDULE

	as necessary	daily	other
Unit surfaces	√		
Hoses	√		
Vacuum system	√		
Solids collector		√	
Air & water filters			3 month service

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Warranty

WARRANTY

Knight by Midmark products are warranted against defect in material and workmanship for a period of 2 years, unless otherwise indicated in writing, from the time of delivery.

Exceptions:

1) "KINK-VALVE" module carries a 10 year warranty.
2) The original light bulb on a new light carries a 1 year warranty.
3) Accessories not manufactured by Knight are excluded (i.e. Fiber optic systems, Scalers, Electric micromotor systems, Curing light systems, X-ray viewers, etc.)
4) Replacement parts and accessories carry a 90 day warranty.

Knight's sole obligation under the warranty is either to provide parts for the repair or to provide the replacement product (excluding labor and shipping). The buyer shall have no other remedy. All special, incidental and coincidental damage is excluded. Written notice of breach of warranty must be given to Knight within the warranty period.

The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilization chemicals and processes.

No other warranties as to merchantability, fitness for use or otherwise are made.

Technical Information

Circuit diagrams, parts lists, technical descriptions, etc. will be provided upon request.

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DECLARATION OF CONFORMITY

MIDMARK CORPORATION

Midmark Corporation declares that SW and S-21 Dental Units conforms to the applicable requirements of the Medical Device Directive 93/42/EEC, Annex V and VII.

Serial Numbers: UA1278, UW01032, UC0971, and UK0148 to present.

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Notified Body
LRQA Limited
Hiramford
Middlemarch Office Village
Siskin Drive
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Certificate #: 961351/B

Quality Assurance Manager

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October 18, 1999

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KA940600

Knight®
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